

HYBRID 15 SPORT E



ENGLISH USER MANUAL

REVIEW MANUAL CAREFULLY TO AVOID PERSONAL INJURY
AND/OR DAMAGE TO YOUR VEHICLE

THIS VEHICLE IS DESIGNED FOR ADULT USE ONLY.
OPERATION IS PROHIBITED FOR ANYONE UNDER 16 YEARS OF AGE

PLEASE DRIVE RESPONSIBLY.
USE OF A HELMET WILL HELP MINIMIZE RISK OF INJURY
AND COULD SAVE YOUR LIFE.
FAILURE TO COMPLY MAY RESULT IN FINES WHERE MANDATED BY MUNICIPAL LAW





WARNING / AVERTISSEMENT



IMPROPER ELECTRIC BICYCLE USE CAN RESULT IN SEVERE INJURY OR DEATH

L'UTILISATION INCORRECTE DU VELO PEUT RESULTER EN BLESSURES GRAVES OU MEME LA MORT.



ALWAYS USE A DOT APPROVED HELMET AND PROTECTIVE GEAR.

TOUJOURS PORTER UN CASQUE ET DES VÊTEMENTS DE SÉCURITÉ APPROUVÉS



DO NOT CARRY PASSENGERS

NE JAMAIS ACCEPTER DES PASSAGERS



NEVER USE ON HIGH SPEED ROADS

NE JAMAIS UTILISER SUR DES ROUTES PUBLIQUES



NEVER USE WITH DRUGS OR ALCOHOL

NE JAMAIS CONDUIRE SOUS L'INFLUENCE DE STUPÉFIANTS OU D'ALCOOL

NEVER OPERATE:

- Without proper training or instruction.
- At speeds too fast for your skills or conditions.
- With passenger/passengers who will throw you off balance and result in injury or death.
- On highways or highspeed roads.

ALWAYS:

- Wear proper riding gear
- Avoid un-paved surfaces may seriously affect handling and control.

NE JAMAIS conduire:

- Sans avoir reçu d'entraînement ou de l'instruction appropriés.
- À des vitesses excédant vos compétences ou les conditions de conduite.
- Avec un/des passagers. Ceci peut vous faire perdre l'équilibre et provoquer des blessures ou la mort.
- Dans les autoroutes ou les routes à grande vitesse.

TOUJOURS:

- Portez des vêtements appropriés et des lunettes de protection.
- Évitez les surfaces non pavées qui peuvent affecter sérieusement la manipulation et le contrôle du vélo.

LOCATE AND READ OWNER'S MANUAL CAREFULLY BEFORE OPERATING. FOLLOW ALL INSTRUCTIONS AND WARNINGS.

REPÉRER ET LIRE LE MANUEL DU PROPRIÉTAIRE. SUIVRE TOUS LES AVERTISSEMENTS ET DIRECTIVES.



WARNING / AVERTISSEMENT



This manual should be considered a permanent part of the electric bicycle and should remain with the electric bicycle when resold or otherwise transferred to a new user or operator. The manual contains important safety information and instructions which should be read carefully before operating the electric bicycle.

IMPORTANT!

DO NOT RETURN TO STORE!
CONTACT ECOPED FOR ASSISTANCE.

NOTICE IMPORTANTE!

NE RENVOYER PAS AU MAGASIN!
CONTACTEZ ECOPED POUR L'ASSISTANCE.

6.

**THIS VEHICLE IS A POWER
ASSISTED BICYCLE AND
MEETS ALL THE
REQUIREMENTS UNDER
SECTION 2(1) OF THE
CANADA MOTOR VEHICLE
SAFETY REGULATIONS.**

CE VÉHICULE EST UNE BICYCLETTE
ASSISTÉE ET RECONTRE LA NORME 2(1)
DU RÈGLEMENT SUR LA SÉCURITÉ
DES VÉHICULES AUTOMOBILES DU CANADA.

WELCOME

Thank you for purchasing the ECOPEd HYBRID 45e.

LIMITED WARRANTY

ECOPED, gives a 90 DAY LIMITED WARRANTY from the date of purchase on all components of the ECOPEd Electric Bicycles against defects in material or workmanship. During the warranty period ECOPEd will repair, provide replacement parts or replace your ECOPEd HYBRID 45e at no charge as per ECOPEd discretion. This warranty does not cover normal wear items or damage caused by neglect or misuse of the product.

Electric Motor	90 days
Battery (see battery section)	90 days
Frame	90 days

Warranty void if:

- Frame is bent or broken.
- Wheels are bent or broken.
- Fender is bent or broken due to abuse.
- Any sign of accident, impact, jumping, spin-outs or roll over.
- Any electric bicycle that has been altered structurally, modified, neglected, improperly maintained or used for racing.
- Improper or infrequent battery charging (see battery section).

This warranty begins on the date of purchase. This warranty is not transferable to another consumer.

All information contained within this publication is based on the latest product information at the time of publication. Due to constant improvements in the design and quality of production components, some minor discrepancies may result between the actual vehicle and the information presented in this manual. We reserve the right to make product changes at any time, without notice and without incurring any obligation to make the same or similar changes to the electric bicycle previously built or sold. Depictions and/or procedures in this publication are intended for reference use only. ECOPEd is not liable for any incidental, consequential, or contiguous damages arising from the use of this product.

REGISTRATION

The warranty registration form must be sent to ECOPED within 30 days of purchase. The registration form is included on the last page of the owner's manual. It must be submitted by mail (address on form) or through online registration at: enter www.ecoped.ca for warranty coverage. Upon receipt of this registration, ECOPED will record and register warranty. No verification of registration and warranty will be sent to the purchaser. **NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR ELECTRIC BICYCLE IS REGISTERED WITH ECOPED and a COPY OF THE SALES RECEIPT IS PROVIDED.**

WARRANTY COVERAGE AND EXCLUSIONS

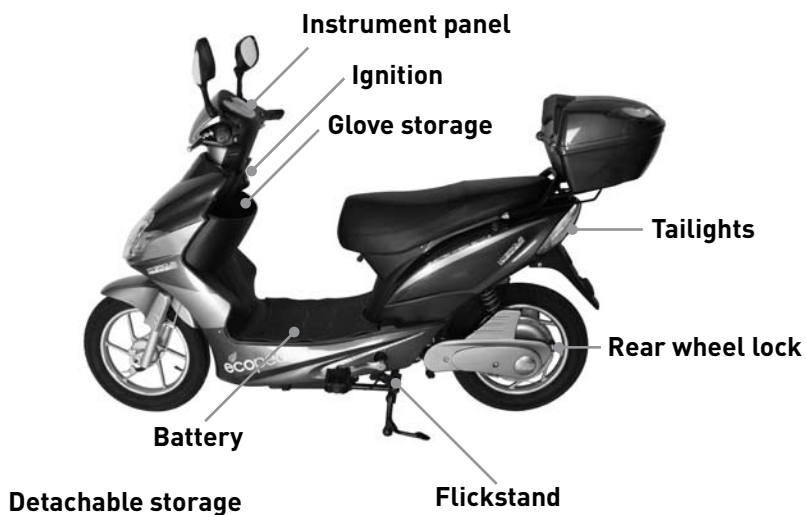
ECOPED limited warranty excludes any failures that are not caused by a defect in material or workmanship. The warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty does not cover any ELECTRIC BICYCLE that has been altered structurally, modified, neglected, improperly maintained, or used for purposes other than for which it was manufactured and intended. ECOPED does not cover any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts including chemicals, fuels, and lubricants.

PLEASE SEE THE SAFETY SECTION BEFORE OPERATING YOUR ELECTRIC BICYCLE!

Initial set-up and proper Pre-Delivery Inspection of your ELECTRIC BICYCLE is very important in ensuring trouble-free operation.

HOW TO OBTAIN WARRANTY SERVICE

If your ELECTRIC BICYCLE requires warranty service, please contact the ECOPED customer service center at 1-877-528-3772 for instructions on filing for a warranty claim. You can also find a list of authorized ECOPED service centers listed on the web site: www.ecoped.ca. When requesting warranty service you must have your copy of the Warranty Registration form and the sales receipt for authorization.



Detachable storage



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WARNING

Failure to follow the warnings contained in this manual can result in death and/ or serious injury.

AN ECOPED ELECTRIC BICYCLE can be dangerous if used incorrectly. Collision or loss of control can occur quickly, even during routine maneuvers like turning. It is important to take all necessary precautions while operating your electric bicycle in order to ensure optimum safety.

Read and understand your owner's manual and all warnings before operating an ECOPED ELECTRIC BICYCLE.

AGE RESTRICTIONS

This vehicle is an ADULT VEHICLE ONLY. Operation is prohibited for anyone under the age of 16.

12. KNOW YOUR ELECTRIC BICYCLE

The operator of the electric bicycle is responsible for their own personal safety, the safety of others, as well as respecting and preserving the environment.

Never operate the ELECTRIC BICYCLE without proper understanding of Safety Training in the Owner's Manual. ECOPED highly recommends that beginners take a training course with a licensed instructor. Always follow the age recommendations. You can access information on electric bicycle rider training programs on our web-site:

www.ecoped.ca

Operating this ELECTRIC BICYCLE without proper instruction could be hazardous to the operator. The risk of riding could increase greatly if you are not trained to operate the ELECTRIC BICYCLE properly under different situations and weather conditions.

For information on e-bike legislation in your area, please visit www.ecoped.ca. Under the duration of provincial pilot programs, all conventional bicycle legislation and fines apply to the use of e-bikes such as your new ECOPED HYBRID 45e.

SAFETY LEGEND

You will come upon the following three types of safety notes and reminders when reading through the manual:



WARNING



The safety alert warning indicates a potential hazard that may result in serious injury or death.



CAUTION

The safety alert caution indicates a potential hazard that may result in minor personal injury or damage to the vehicle.

CAUTION

A caution indicates a situation that may result in damage to the vehicle.

IMPORTANT SAFETY NOTES

Serious injury or death can result if you do not follow the instructions and procedures listed below. Further notes are listed throughout the manual.

Read this manual and all labels carefully, and follow the operating procedures described on how to properly use your electric bicycle.

- Never operate your electric bicycle if you have uncertainty in your skills. Learn and take advice from someone who is more experienced at riding before getting behind the wheel for yourself.

- Know your provincial age restriction and never allow anyone under the minimum age requirement to operate your electric bicycle.
- Never permit a guest to operate your electric bicycle unless the guest has read this manual and all product labels.
- Never operate on sidewalks or pedestrian walkways.
- Limit the use of your electric bicycle at night or at dark times of day when visibility is restricted.
- It is not recommended to operate your electric bicycle if you have an inseam of less than 22".
- The electric bicycle must not be operated by anyone shorter than 60".
- Never use headphones or cellular phones when operating your electric bicycle.

14.

- Never operate if barefoot, wearing sandals, open toed, high heeled, platform or slip on footwear, as this will prevent you from conducting emergency breaking procedures.
- Never operate without two hands on the handle bars.
- Never operate while not seated properly.
- Never operate with excessive speed for the terrain, and with clothing or extremities in close proximity to the drive chain or any moving parts.
- Never operate if unsure of emergency and proper riding procedures.
- Never stop by only using the front brake. Use both breaks simultaneously.
- Never accelerate and have one or both brakes on at the same time, as this will damage the motor and drivetrain.

- Do not remove any reflectors, lights and other standard equipment as this will jeopardise your safety and the performance of your electric bicycle.
- Never exceed speeds of 32km/h (20mph).
- Never carry cargo big enough to obstruct your front or rear line of sight.
- Always ride your bicycle on paved surfaces, and avoid unpaved, rough gravel, and natural surface, as those surfaces will damage your electric bicycle.
- Never operate your electric bicycle without wearing a DOT approved helmet that fits properly. It is recommended that riders wear eye protection to protect the eyes from any fine, flying debris.
- Always operate your electric bicycle at safe speeds which will allow you to avoid any sudden obstacles and allow for safe braking.
- Never attempt wheelies, jumps, or other stunts.
- Always inspect your electric bicycle before each use to make sure it's in safe operating condition. Always follow the inspection and maintenance procedures and schedules outlined in your owner's manual.
- Always keep both hands on the handlebar and both feet on the footrest of the electric bicycle during operation.
- Always ride slowly and take precaution when operating your electric bicycle on a terrain other than tarmac.
- Never operate on excessively rough, slippery, or loose terrain.
- Always follow proper turning procedures as described in this manual. Practice turning at low speeds. Do not turn at excessive speeds.
- Never operate on hills too steep for the electric bicycle or for your abilities. Practice on smaller hills before attempting steeper hills.

- Always follow proper procedures for going downhill and for braking on hills. Check the terrain carefully before you start down a hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight down the hill when possible.

- Always use extra caution when travelling uphill. If you don't start accelerating immediately, your electric bicycle will roll back until you twist the throttle grip enough to propel the bicycle forward.

- Avoid riding over debris or obstacles on the road such as pot holes and fallen tree branches.

- Always be careful of skidding or sliding. On slippery surfaces like ice, travel slowly and use extra caution to reduce the chance of skidding or sliding out of control.

- Never consume alcohol or drugs before or while operating your electric bicycle.

- Always replace worn out or punctured tires with proper tire and tube sizes, as well as maintain the required pressure as noted in the manual.

- Take extra caution and follow installation instructions when modifying your electric bicycle with factory accessories.

- Never modify your electric bicycle with home made accessories, as doing so will void the warranty and may cause unpredictable behavior of your vehicle, posing a risk to your safety.

- Never exceed the stated load capacity for your electric bicycle. Cargo should be distributed properly and attached securely. Reduce speed and follow instructions in this manual for carrying cargo. Allow longer distance for braking.

- The combined weight of the rider and any accessories or cargo must never exceed the load capacity of your electric bicycle.

SAFETY DECALS AND LOCATIONS

Warning decals have been placed on the electric bicycle for your protection and future reference in case of uncertainty. Read and follow the instructions of the decals and other warnings on the electric bicycle carefully. If any of the decals shown in this manual differ from the decals on your electric bicycle always read and follow the instructions of the decals on the electric bicycle.

If any decal becomes illegible or comes off, contact ECOPED for a replacement.





SAFETY GEAR

A DOT approved bicycle helmet is the most important part of your safety gear. An approved bicycle helmet can help prevent a serious head injury. Choose a helmet that fits snugly.



Goggles are also an important safety component of your safety gear. When travelling on your electric bicycle, insects and airborne debris will become a serious hazard, and hitting them may result in eye injury.



WARNING

Operating this electric bicycle without wearing a DOT approved motorcycle helmet, eye protection, and protective clothing could be hazardous.

Operating without a DOT approved motorcycle helmet, increases your chances of a severe head injury or death in an accident.

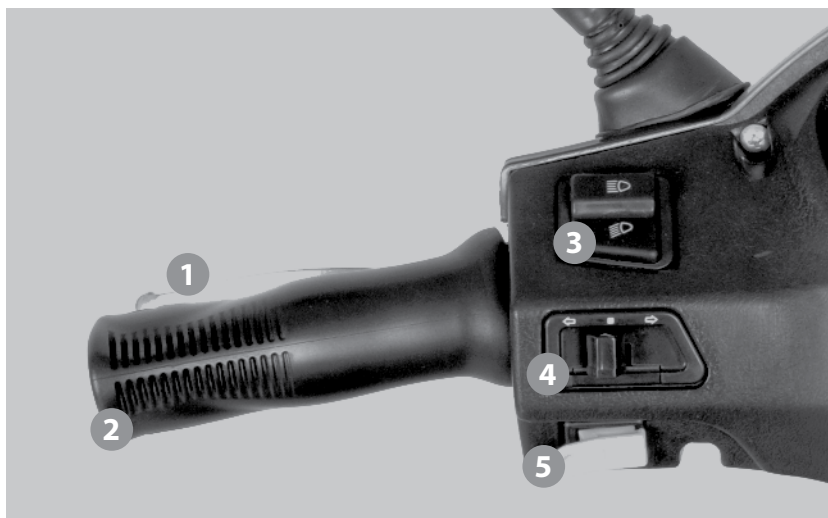
Operating without protective clothing also increases your chances of severe injury in an accident.

You should always wear eye protection when riding your electric bicycle. Debris such as a rock or a branch can harm exposed eyes and could result in severe injury.

Proper clothes can protect you from injury.

LEFT HANDLEBAR

Make sure to familiarize yourself with the controls. Your left handlebar has the following controls on it.



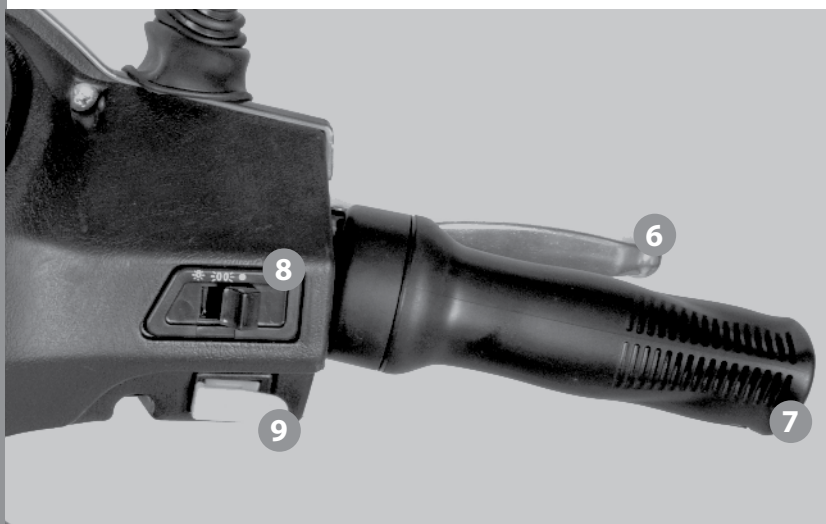
- 1 The left brake lever engages or disengages the front brakes. Apply the left brake by squeezing the lever towards the grip. Release the lever to disengage the brake.
- 2 This is the left grip.
- 3 By toggling between the two switch modes, you can increase or decrease your headlight intensity. This switch works only in conjunction with switch #1 seen on pg 29.
- 4 By sliding this switch to either side, you can signal left or right, informing vehicles around you of where you intend to turn.
- 5 Left horn switch. Press this button when you want to sound the horn. The horn will sound for as long as you hold the switch.

19.

RIGHT HANDLEBAR

Make sure to familiarize yourself with the controls.

Your right handlebar has the following controls on it:



6 The right brake lever engages or disengages the rear brakes. Apply the rear brake by squeezing the lever towards the grip. Release the lever to disengage the brake.

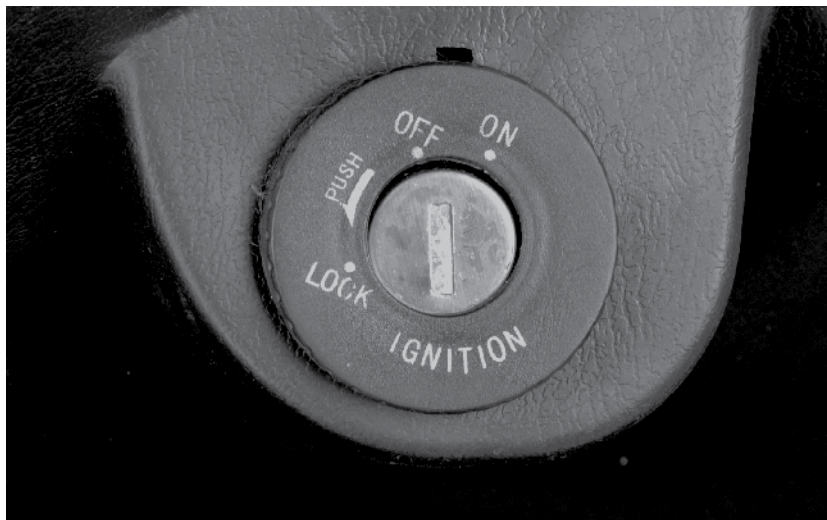
7 This is the right grip. It is also the throttle grip. Twist the throttle grip towards yourself, and the bicycle will speed up. Twist it away from yourself, and the electric bicycle will slow down.

8 The headlight and the dash light switch. Slide the switch to the left to only turn the instrument panel light on. Slide the switch all the way to the left to switch on both the instrument panel light and the headlight.

9 Right horn switch. Press this button when you want to sound the horn. The horn will sound for as long as you hold the switch.

IGNITION

Your electric bicycle is equipped with a two step ignition system which better protects your electric bicycle from ignition jack based theft. You are also provided with a unique set of keys which work specifically, and only with your ignition. To turn the electric bicycle on, simply insert and twist the key to the 'ON' position.



21.

INSTRUMENT PANEL

Be careful when reviewing indicators, speed and battery gauges, as you must always keep your eyes on the road. Make sure to study your controls before riding.



The battery meter indicates your current battery charge, with 'H' being high and 'L' being low.



The 'left' light will flash yellow once you decide to signal a left turn.



The 'right' light will flash yellow once you decide to signal a right turn.



The headlight light will turn on, and stay on for as long as your headlights are on.



WHEELS

Your electric bicycle runs on two wheels, each made up of one rim, one tire and one tube. Each rim, the back and the front, are especially designed for their use on ECOPED electric bicycles.

TIRES

Your electric bicycle runs on two identical hard compound tires to ensure maximum longevity. Your tires have a specially designed, multi use T88 tread, that was developed specifically for use on all kinds of tarmac and loose gravel surfaces. Keep your tires inflated to a PSI of 28-34. When tread becomes worn, replace your tires with ECOPED approved tires.

TUBES

The tires on your electric bicycle runs on air tubes which ensure maximum protection against sharp debris on the road. The tubes must be inflated to 28-34 PSI, and must be treated with equal consideration, just like the tires and any other component on your electric bicycle.

MOTOR

Your electric bicycle runs on a DC 350W,48V brushless motor. It is located in the rear wheel hub, and is designed for quick and quiet acceleration and resistance free operation.

CAUTION

Only use ECOPED authorized replacement parts. Using home made parts will void the warranty and cause unpredictable behavior, which may result in serious injury and damage to your electric bicycle.

BATTERY

Your electric bicycle is equipped with a 48V,8A(Rated) lead-acid rechargeable battery that has a life of about 300-400 charges, and is designed to carry you on a distance of 40-60km, depending on the terrain, slope, and load. All of these factors will influence battery life per charge. Located underneath the removable rubber carpet in the foot rest area, it weighs about 10kg and must be handled with care. Due to its weight and location, ECOPED recommends at least two people to take part in removing the battery. Due to the chemical structure of the battery, it must be handled with caution and care, following the directions listed in this manual.



WARNING



This product contains lead and lead compounds, chemicals known to cause harm to your health. Wash hands after handling.

⚠ WARNING

In case of eye contact with any battery chemicals, rinse with water for at least 15 minutes and get medical attention.



The sulfuric acid contained within the battery can cause blindness and severe burns if in contact with skin.



The chemicals contained within the battery are extremely flammable and must be kept away from sparks, fire, and cigarettes.



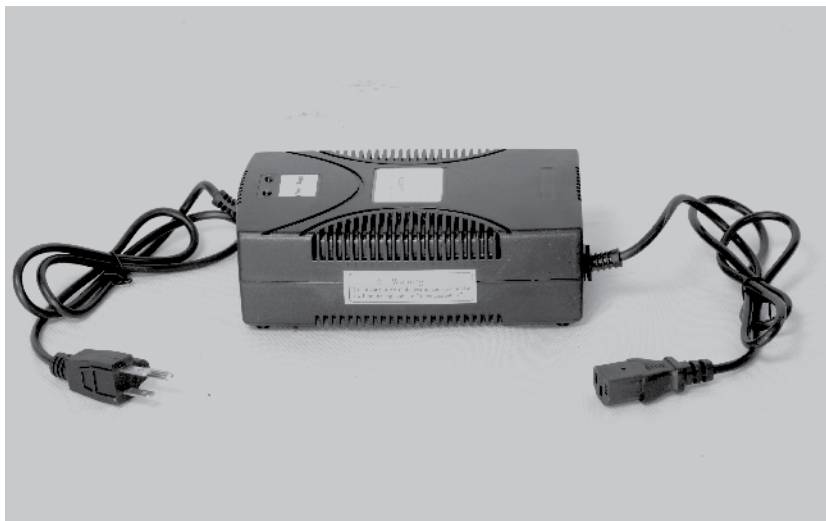
When handling the battery, always wear eye protection.



The chemicals contained within the battery are extremely explosive. Handle with care.

CHARGER

Your electric bicycle comes with an intelligent charger which automatically detects and monitors the battery level while charging. Your intelligent charger is designed for your battery and must not be used with any other battery. The charger has two cables; an input and an output. The input is the connector that looks similar to most home appliance connectors. The input plug must be connected to the wall outlet when charging, and the rectangular output connects to the electric bicycle.



25.

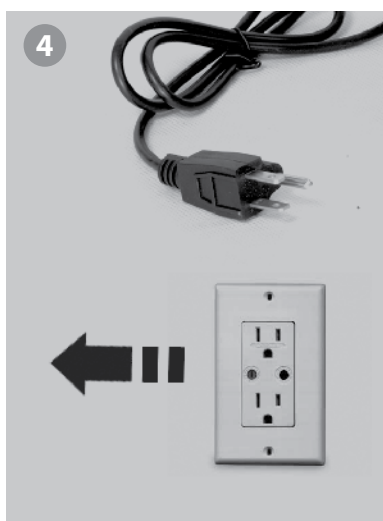
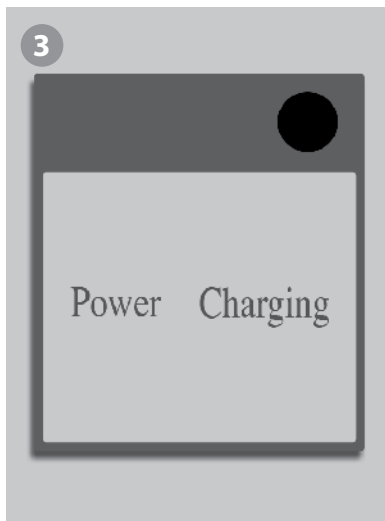
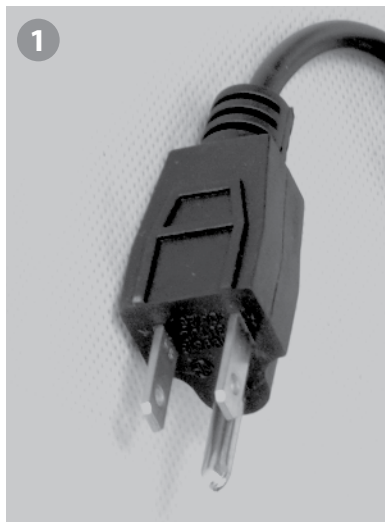


CAUTION

Using a charger or battery that is not certified for use with your ECOPED may result in personal injury or permanent damage to your vehicle. See your ECOPED dealer for replacement information.

FIRST TIME CHARGE

Your rechargeable battery is one of the key elements of your electric bicycle and must be treated with care. Please follow the outlined procedures for charging the battery.



6 HOURS

- 1) Connect the charger to an electrical outlet. 'Power' light turns on.
- 2) Make sure the ignition key is removed and only then connect the charger to the electric bicycle. 'Charging' light turns red.
- 3) Charge for 6 hours until the 'Charging' light turns green.
- 4) When the 'Charging' light turns green, detach the charger from the outlet.
- 5) Detach the charger from the electric bicycle.

REGULAR CHARGE

To perform a regular charge, you must either:

- 1) Remove the battery from its designated place in your electric bicycle and charge it by connecting directly to the charger.
- 2) Connect the charger directly to the outlet in your electric bicycle, which is located just beneath the seat.

Charge your battery after every use as per the procedure outlined above and do not allow it to fully discharge (this may permanently damage it). Avoid frequently removing the battery for charging as unnecessary movement may damage the electrical connections or agitate the chemicals inside.

BATTERY MAINTENANCE

Your rechargeable battery must be handled with care due to the nature of the chemicals inside. If unused for a long period of time, the battery must be removed from the electric bicycle and stored in a dry place at room temperature. Leaving the battery outdoors where temperatures may shift drastically will damage the battery.

WINTER STORAGE

Prior to prolonged winter storage, the battery must be fully charged and must be fully charged every 20 days throughout the storage period to ensure long life. Keep it at room temperature, at no less than 20°C (68°F).

BATTERY RECYCLING

If properly maintained, the battery should last for 300-400 charge cycles. Changes in longevity may indicate that it is time to replace the battery. Contact your local ECOPEDE dealer for more information. ECOPEDE batteries are 74% recyclable, so riding your ECOPEDE electric bicycle is not the only way to stay 'green'!

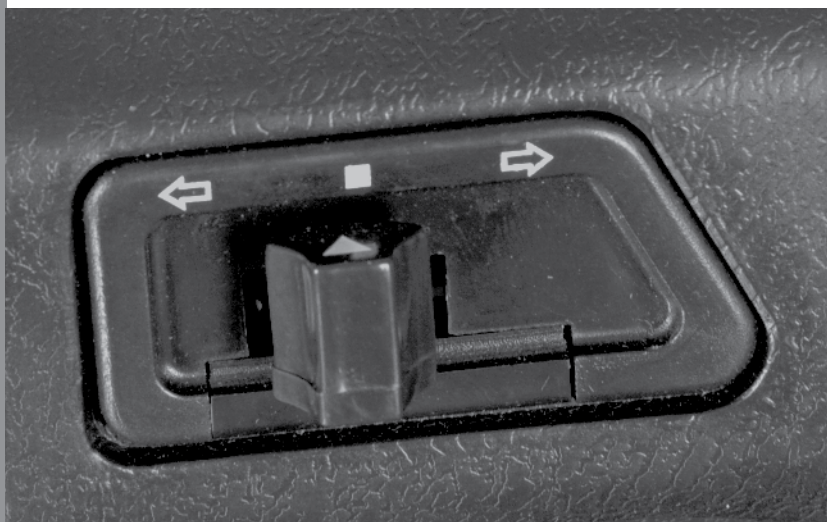
LIGHTING

Your electric bicycle is equipped with front and rear lights in order to ensure your visibility to other vehicles on the road. Every time you signal or brake, an appropriate light turns on or begins to blink. When signaling right or left, an orange light will begin to blink on the appropriate side of your electric bicycle. A sound will also be emitted in order to keep you informed. When braking, a red light will go off on the back of the electric bicycle. Headlights must be turned on in either low-beam or high-beam mode when lighting conditions may hinder your visibility.

LEFT/RIGHT SIGNALS

The below procedures outline how to signal turns with your electric bicycle.

- 1) Slide the switch to either left or right. The switch will click and then go back to its initial position.



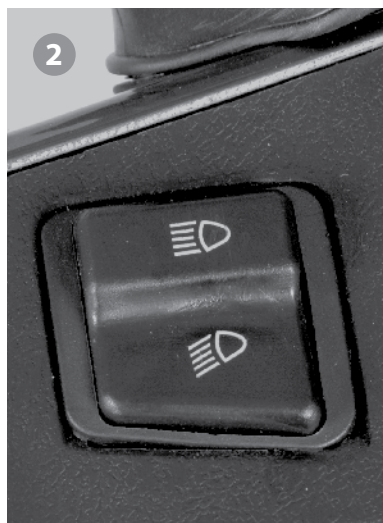
2) To turn the signal off, press the switch down. The switch will click and go back to its initial position.

HEADLIGHTS

To turn your headlights on simply slide switch #1, shown below, to an appropriate position. The back light for your instrument panel will turn on automatically.

HIGH & LOW BEAMS

To toggle between the high and the low beams, push switch #2 shown below to an appropriate position.



29.

MIRRORS

Mirrors are an important safety feature of your electric bicycle and must remain installed at all times. Mirrors are designed to keep you safe by informing you of the conditions around you. Adjust your mirrors to a position which ensures maximum range of visibility from behind. Failure to follow the above outlined procedures can cause an accident, resulting in serious injury.

INSPECTION & MAINTENANCE

Inspection and maintenance are two processes which you must be committed to in order to ensure safe rides, and a long life for your electric bicycle.



CAUTION

Failure to properly inspect and maintain your electric bicycle will result in quick degradation and wear of parts, as well as unpredictable behavior which will put your safety at risk.

Failing to inspect your electric bicycle before operating could be hazardous.

Failing to inspect your electric bicycle before operating increases the chances of an accident or equipment damage.

Always inspect your electric bicycle each time before riding, and make sure it is in a safe operating condition.

30.

INSPECTION GUIDE

When performing an inspection, follow the steps below, and they will help you to perform an efficient and correct inspection that will ensure you a safe ride and prolonged life for your electric bicycle.

INSPECTION BEFORE RIDING

BRAKES

1

Check your front and rear brakes by standing next to your electric bicycle and engaging one brake at a time. Start with the front. Squeeze the lever half way and check to see if there is resistance by trying to move the electric bicycle forward. You should have a hard time moving it forward, but it will still move. Squeeze the lever all the way, and try to move the bicycle. The brakes should be locked up completely and the bicycle should not move. When checking the rear brake, sit on your electric bicycle and perform the same procedure. Move the bicycle with your feet.

STEERING

2

Check your steering by stepping over your electric bicycle and moving the bars from left to right. Make sure the bars rotate freely and that there is nothing restricting the bars from completing the rotations. Make sure there is no play or looseness when rotating the bars.

TIRE PRESSURE

3

Check the tire pressure by manually squeezing the tire or using a PSI gauge. The tire pressure should be from 28-34PSI in order to ensure a safe ride.

HORN

4

Check that the horn buttons work. The horn installed on your electric bicycle is loud and must not be tested indoors, as this may cause hearing damage.

LIGHTS

5

Check the headlights by turning them on and off. See pg 29 for details on the switches used to turn the headlights on.

THROTTLE

6

Check the throttle response by turning your electric bicycle off and twisting the right grip back and forth. Make sure that the grip rotates back to its original position easily.

CHAIN

7

Check the chain tension by applying pressure and the chain with your finger. The chain should feel tensioned up and not loose.

MIRRORS

8

Check your mirrors when you are outside and ready to ride. Adjust both mirrors to a maximum field of view.

BATTERY

9

Check the battery level! Always keep the battery charged. Plug in you electric bicycle every time you come back from a ride.

INSPECTION AFTER RIDING

- 1 After riding, make sure that your electric bicycle is turned off and the key is removed from ignition.
- 2 Make sure to leave the battery charging by plugging the charger into your electric bicycle.
- 3 Make sure that one of the two kickstands is engaged when your electric bicycle is parked.

MAINTENANCE

Maintaining the bike requires commitment and a schedule that must include visits to your local dealers.



CAUTION

Never try to disassemble your electric bicycle for yourself, but always have an ECOPED authorized bicycle mechanic perform all repairs. Performing some maintenance techniques by yourself might damage your electric bicycle and result in serious injury.

LUBRICATION

Perform chain lubrication every month. Clean the chain from any debris and remove any old lubricant with a dry cloth. Make sure to use quality chain lubricants and follow all of the specified instructions.

TIRES

Check your tires every couple of weeks for any signs of wear. Replace the tires at your local service center if no tread is visible.

BRAKES

Brake maintenance must be performed biweekly. To tighten a loose break, unscrew the bolt located at the end of the lever and tighten it by screwing the nut into the opposite direction. Check the lever travel. Make sure not to overtighten the breaks, as this will over-heat and damage the motor.

RIDING

Riding your electric bicycle will require your full attention and concentration in order to ensure maximum safety to yourself and others travelling on the road. Every time you step outside to travel or commute on your electric bicycle, you will have a different experience from riding, based on the weather, terrain and traffic conditions. Therefore, ECOPED recommends that you follow all of the tips and procedures outlined below, to ensure you a safe ride on your electric bicycle.

WEATHER

Operating your ECOPED in wet weather conditions may pose a substantial risk and is not recommended. Try to limit your use when rain and other precipitation is expected. Stay informed about the weather forecast in your area and plan your use accordingly.

WEATHER CONDITIONS

Your electric bicycle is designed to operate in warm weather at about 68F (20°C). Avoid use on overly humid or dry days. The temperature also affects the efficiency of the battery, allowing it to function more effectively in warmer temperatures. Temperatures of 35F (0°C) will reduce the battery performance to more than 1/3. Operating at extreme levels of temperatures and humidity will reduce the performance and life time of your battery and non-electric components.

CAUTION

Operation in any intensity of rain or snow is not recommended. Moisture poses the biggest risk to damaging your electric bicycle. Warranty does not cover damage due to moisture.

SEASONS

Your electric bicycle has a minimum and maximum operating temperature, restricting the bicycle from operating in certain seasons such as late fall, winter, and early spring. Depending on the climate of your geographical area of residence, the temperatures in those times of the year can drop below the minimum operational temperatures, restricting you from operating your electric bicycle. Your electric bicycle is designed to operate in between the temperatures of -10°C and $+40^{\circ}\text{C}$ ($14-104^{\circ}\text{F}$).

ROAD CONDITIONS

Your electric bicycle is designed for certain road conditions which will depend on the current season and range of temperatures. Your electric bicycle is designed to be ridden on dry tarmac, having enough grip to handle well on tarmac covered with light gravel.

CAUTION

Tarmac roads covered with heavy gravel, or entirely consisting of gravel, must not be ridden on, as doing so will put your safety and your electric bicycle at risk.

CAUTION

Your electric bicycle must not be operated on snow or winter salt covered roads. Salt and water are harmful to the circuits inside of your ECOPEd and must be avoided.

RIDING OVER OBSTACLES

Your electric bicycle is designed to have sufficient ground clearance for normal use. Avoid large obstacles as often as possible or provide support with your legs when riding over large objects.

CAUTION

Avoid extremely steep slopes as this will severely damage the bottom of your electric bicycle.

RIDING DOWNHILL

Your electric bicycle is equipped with a PRS or power regeneration system, which uses an alternator to convert energy generated from coasting to electric energy. Never speed downhill and always keep your hand on the brakes in case of an emergency. Limit your speed by constantly applying the brakes. Your electric bicycle is not designed to travel faster than 40km/h. Such speeds will be reached when going down very steep hills, and therefore such hills must either be avoided or ridden on responsibly.



CAUTION

Speeding will cause damage to the wheel mechanism of your electric bicycle and may result in loss of control and personal injury.

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RIDING UPHILL

Riding uphill requires experience and knowledge of your electric bicycle's potential. Your electric bicycle is designed to carry a total load of 105kg, including itself, up on a maximum slope of 16°. A larger load will decrease the maximum climbing angle as well as the speed at which the electric bicycle will travel up that hill.



WARNING



Travelling too slow up the hill will cause loss of balance, resulting in serious injury.

PEDALING

Your electric bicycle is equipped with folding pedals. In case of a battery or motor failure, pedals can be used as an alternative method of power. When standing still, use the pedals to start the electric bicycle moving forward, and then switch over to electrical power when needed. This method will greatly conserve battery power during commuting or long periods of use.

TURNING

When riding your electric bicycle, it's your responsibility to be a safe and informed driver. When on the road, do not make any sudden movements when turning into an intersection. Always signal and check your mirrors and blindspots. Before turning, slow down to a safe speed which will allow for a safe execution of the turn. For more information, refer to your provincial motorcyclist handbook.

ACCELERATING

Your electric bicycle is designed to gradually accelerate to a speed of 32km/h from standstill. Depending on the total weight load, it may take a few hundred meters for your electric bicycle to accelerate to its top speed. Travelling at top speed is dangerous if not carried out correctly. Any sudden movements or swerves may cause the bike to lose control and may cause serious or fatal injuries. When accelerating, keep the bicycle moving straight, and make sure none of the brakes are engaged.



WARNING



Any sudden movements or swerves may cause the bike to lose control and may cause serious or fatal injuries.

BRAKING

Your electric bicycle is equipped with drum brakes at both, rear and front. When braking, gradually squeeze the right lever until the bicycle comes to a complete stop. The right lever engages the front brake, which are proven to be more efficient than rear brakes in most situations. Squeezing the right lever will engage the back brakes. Use back brakes in conjunction with front brakes to achieve the fastest and safest braking. Do not solely rely on a single brake.

PARKING

Your electric is equipped with two kickstands: a flick stand and a double stand. Essentially, a kickstand is used to temporarily park your electric bicycle on either short or prolonged periods of time. The two types of kickstands that your electrical bicycle is equipped with, both have different purposes and methods of use.

HANDLEBAR LOCK

Your electric bicycle is equipped with a handlebar lock, to prevent the handlebars from rotating. To engage, turn the steering column to a desired position and twist the key counterclockwise, to the 'Lock' position. When engaged, the handlebars would lock up.

REAR WHEEL LOCK

Your electric bicycle is equipped with a rear wheel lock, to prevent the rear wheel from rotating. To engage, insert an alternative, elongated key, and turn clockwise. When engaged, the rear wheel would lock up. Rotation would be impossible

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REAR WHEEL LOCK



HANDLEBAR LOCK

FLICK STAND

The flick stand is a smaller stand that should be used whenever you are away from your electric bicycle for a short period of time. The flick stand can be deployed much quicker than the double stand and can be used in the case of quick emergency parking. Its a good practice always turn your front wheel to the right, face your electric bicycle towards the back of a wall or any other structure in order to ensure maximum visibility for drivers of larger vehicles. Never sit on the electric bicycle when it is parked and the kickstand is deployed, as this will permanently damage the kickstand mechanism.



FLICK STAND



DOUBLESTAND

DOUBLE STAND

The double stand is a larger stand that uses two metal 'legs' to balance your electric bicycle. When deploying, make sure that the ground surface underneath is hard and rough. Use the little foot pedal to pull the stand out half way, and then push the bicycle backward while at the same time, pushing on the little pedal. The double stand is more reliable and sturdy than the flick stand, and should be used when parking on uneven surfaces. The double stand should also be used during service parking. When folding the double stand back to its position, step on the little foot pedal and force the bicycle forward while keeping your weight on the pedal. Never sit on the electric bicycle when it is parked and the double stand is deployed, as this will permanently damage the kickstand mechanism.

STORAGE

Your electric bicycle is equipped with three storage compartments for your convenience and ease of transportation. The primary, and the smallest area, the glove storage, is located underneath the instrument panel, in the front of your electric bicycle. The secondary area, or the seat storage, is located underneath the seat. The third area, or the detachable storage, is in the form of a detachable container attached to the edge of your seat.



CAUTION

Cargo areas have limited load capacity restrictions which must be precisely followed, otherwise loss of control, injury and damage to the electric bicycle may occur.

GLOVE STORAGE

Your electric bicycle is equipped with a built in glove storage compartment where you can temporarily store such small objects as keys, cellphones, wallets, water bottles, and of course - gloves.

SEAT STORAGE

Your electric bicycle is equipped with a built in storage area which you can use to transport objects of a limited weight (see the specifications section for detailed limitations). The built in storage area is located underneath your seat and is protected by a security lock.

DETACHABLE STORAGE

Your electric bicycle is equipped with a detachable storage compartment which you can use to transport objects of a limited weight (see the specifications section for detailed limitations). The built in detachable storage area is located on the top end of the seat, and is also equipped with a security lock.

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SEAT STORAGE



DETACHABLE STORAGE

ELECTRIC BICYCLE STORAGE

Follow the steps outlined below when storing your ECOPEDE electric bicycle for long periods of time:

- 1 Prior to storage, make sure to remove the battery from your electric bicycle. Avoid placing any heavy objects, or stacking anything on top of the electric bicycle. The outer body of the bicycle is made of hard plastic which will crack under very heavy loads.
- 2 Store your battery in a dry, warm place away from heat, moisture and fire.
- 3 Make sure to charge the battery every 20 days. Improper storage will result in damage to the electric bicycle and may shorten the life span of crucial components.

ELECTRIC BICYCLE CLEANING

Your electric bicycle contains many electrical components, therefore pressure washing your electric bicycle with water may cause damage. A more delicate cleaning procedure of washing the bicycle by hand is required in order to ensure that water doesn't get into unwanted areas. Before you start cleaning, make sure that the key is removed from the ignition. Use a wet cloth to clean out and remove any unwanted debris such as dirt, dust, and grass. If you notice any debris stuck in the chain drive, make sure to carefully remove it.

SPECIFICATIONS	VALUE
Motor (Constant output)	350W
Motor (Maximum output)	450W
Battery output	48V, 8A
Battery range	40-60km
Battery life (charges)	300-400
Charging time	6-8h
Internal cargo capacity	30*20*20 cm
Detachable cargo capacity	30*34*18 cm
Horn range	5 m
Headlight range	5 m
Front brakes	drum
Rear brakes	drum + EABS
Bicycle weight (no rider)	85kg
Required tire pressure (front and rear)	28-34PSI
Maximum rider weight	x kg
Maximum cargo weight	y kg
Maximum net weight	x+y=105kg
Maximum climbing angle	16°
Rim diameter	32 cm
Tire width	8 cm
Maximum speed	32km/h
Minimum operation temperature	-10° - 14F
Maximum operation temperature	+40° - 104F
DIMENSIONS	
Wheelbase	1270mm
Height	1090mm
Width	620mm
Length	1870mm

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